

4167

Diag. Cht. No. 1251-2

U. S. COAST AND GEODETIC SURVEY

MAY 5 1924

FORM NO.

Form 504
DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
State: <u>FLORIDA</u>
11-5813
DESCRIPTIVE REPORT.
Hydro. Sheet No. <u>4167</u>
Field No. <u>8</u>
LOCALITY:
<u>Boot Key Harbor</u>
<u>Vicinity of Knights Key</u>
<u>1920</u>
CHIEF OF PARTY:
<u>F.B.T. Siens, H. & G. Engineer</u>

4167

Descriptive Report to accompany
Hydrographic Sheet No. 8.

Locality: This survey constitutes a revision survey of what is locally known as Boot Key Harbor, in the locality of Knight Key, Florida.

Control: The hydrography is based on the two triangulation stations Knight and Boot determined during the season and on plane table triangulation carried into the harbor from the two triangulation stations named.

General Description: Key Vaca is locally known as Boot Key and on the west end of it, is located the remains of a railroad construction camp and partly dismantled machine shop. A marine railway is also located here and is being operated at the present time by the F.E.C.Rwy. to haul out dredges for repairs. During the construction of the railroad, a channel was dredged to the pier and Marine railway at Boot Key, and now has a controlling depth of 7 ft. at the entrance, at low water, also, the bottom along the entire length of the channel is of very soft material making it entirely safe for boats of 7-1/2 ft. draft to enter at any time. There is a slight cross current in the channel at times. A borrow pit forming a channel of 7 to 8 ft. of water at low tide, connects with the main channel on the west end and on the east end of the borrow pit the channel continues and extends into the dredged basin where a land locked harbor can be had. The latter channel however is quite narrow and has a sharp bend between islet of marl and shoal that bares at low water with a depth of about 5-1/2 ft. at low tide. It would be a difficult and probably an uneconomical undertaking to coal ship at the bulkhead pier. Trouble is experienced by the camps at Boot Key and at Marathon to obtain what little coal they require to run their steam plants. This coal is shipped from Jacksonville, Fla. by rail and the cost would probably be excessive.

The dock at Boot Key consists of a bulkhead which has broken away underneath making it impossible to get alongside nearer than 10 feet. Fresh water is piped to a place on the bulkhead where it is readily accessible.

Plotting: As the topography and hydrography were made for the purpose of chart revision, and as the amount of work required for this purpose was small, it was not considered necessary to make a hydrographic smooth sheet projection. The hydrographic positions were therefore plotted on the topographic sheet. Through misunderstanding these sounding lines were drawn in ink.

Tides: Tides for the reduction of soundings were observed in the immediate locality.

Respectfully submitted
J. B. Williams
Chief of Party

Statistics Sheet # 8.

Cutter Hydrography, Boot Key Harbor, Florida.

Date	Letter	Volume	Positions	Soundings	Miles
Dec. 22, 1920.	A	1	163	1080	2.5

[Handwritten signature]

May 28, 1921.

✓ Division of Hydrography and Topography:

Division of Charts:

Tidal reductions are approved in
1 volume of sounding records for

HYDROGRAPHIC SHEET 4167

Locality: Boot Key Harbor, Florida Keys

Chief of Party: F. B. T. Siems in 1920

Plane of reference is mean low water, reading

2.67 ft. on tide staff at Marine Railway Wharf, Boot Key Harbor

Condition of records: Satisfactory.

Harriman
Chief, Division of Tides and Currents.

Hyd. Sheet No. 4167

Records and work appear to be satisfactory.

All features outside and adjacent to the high water line were transferred from the boatsheet and Top. 3830.

R. L. Johnston

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
WASHINGTON

SECTION OF FIELD RECORDS.

REPORT ON HYDROGRAPHIC SHEET No. 4167.

Surveyed in 1920;

Chief of Party: F.B.T.Siems.

Surveyed by F.B.T.Siems.

Protracted by J.D.Torrey.

Soundings plotted by E.M.Vincent.

Verified and inked by R.L.Johnston.

1. The records conform to the requirements of the General Instructions.
2. The plan and character of development fulfill the requirements of the General Instructions.
3. The plan and extent of the development satisfy the specific instructions, but the value of the survey would have been increased by additional development of the dredged basin.
4. The usual field plotting was done by office draftsmen.
5. As the dredged basin forms a hurricane anchorage for small vessels, it may be thought desirable to do additional surveying in the dredged basin. Surveyed
H-6134
H-536
6. The character and scope of the surveying are good.
7. Reviewed by E.P.Ellis, July, 1921.
8. Two copies of this report to be sent to the Division of Hydrography and Topography.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

HYDROGRAPHIC TITLE SHEET

The finished Hydrographic Sheet is to be accompanied by the following title sheet, filled in as completely as possible, when the sheet is forwarded to the Office.

U. S. Coast and Geodetic Survey.

Register No. 4167
Field No. 8

State . . . Florida

General locality . Florida Keys

Locality . . . Knight Key (Boat Key Harbor)

Chief of party . . F.B.T. Siems

Surveyed by . . F.B.T. Siems

Date of survey . . December 22, 1920.

Scale . . 1:5,000

Soundings in

Plane of reference

On topographic sheet
Protracted by A.H.W. ^{J.D.T. on Hyd. Sheet} Soundings in pencil by E.M.V. .

Inked by R.L.G. Verified by R.L.G.

Records accompanying sheet (check those forwarded):

Des. report, 1 Tide books, _____ Marigrays, 1 Boat sheets,

1 Sounding books, _____ Wire-drag books, _____ Photographs.

Data from other sources affecting sheet Triangulation, 1920.

Remarks: